

IN THE CLAIMS:

Please add new claims 29-31 as follows:

1. (Original) A method for depositing a low dielectric constant film on a substrate, comprising reacting two or more organosiloxanes selected from the group consisting of 1,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, hexamethyldisiloxane, 1,3-bis(silanomethylene)disiloxane, bis(1-methyldisiloxanyl)methane, 2,2-bis(1-methyldisiloxanyl)propane, 1,3,5,7-tetramethylcyclotetrasiloxane, octamethylcyclotetrasiloxane, 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, 1,3,5-trisilanetetrahydropyran, and 2,5-disilanetetrahydrofuran while applying RF power, wherein the low dielectric constant film comprises silicon-carbon bonds and a dielectric constant of about 3 or less.
2. (Original) The method of claim 1, wherein at least one of the organosiloxanes is cyclic and comprises C, H, and O.
3. (Original) The method of claim 2, wherein the cyclic organosiloxane comprising C, H, and O is 1,3,5,7-tetramethylcyclotetrasiloxane.
4. (Original) The method of claim 1, wherein the two or more organosiloxanes are reacted with an oxidizing gas.
5. (Original) The method of claim 4, wherein the oxidizing gas is selected from the group consisting of oxygen, ozone, nitrous oxide, carbon dioxide, and water.
6. (Original) The method of claim 1, wherein the RF power is pulsed to increase the porosity of the film.
7. (Original) A method for depositing a low dielectric constant film on a

substrate, comprising reacting two or more organosiloxanes selected from the group consisting of 1,3,5,7-tetramethylcyclotetrasiloxane, octamethylcyclotetrasiloxane, 1,3,5,7,9-pentamethylcyclopentasiloxane, 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, 1,3,5-trisilanetetrahydropyran, and 2,5-disilanetetrahydrofuran while applying RF power, wherein the low dielectric constant film comprises silicon-carbon bonds and a dielectric constant of about 3 or less.

8. (Original) The method of claim 7, wherein at least one of the organosiloxanes is selected from the group consisting of 1,3,5-trisilanetetrahydropyran, and 2,5-disilanetetrahydrofuran.

9. (Original) The method of claim 7, wherein the two or more organosiloxanes are reacted with an oxidizing gas while applying RF power.

10. (Original) The method of claim 9, wherein the oxidizing gas is selected from the group consisting of oxygen, ozone, nitrous oxide, carbon dioxide, and water.

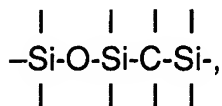
11. (Original) The method of claim 7, wherein the RF power is pulsed to increase the porosity of the film.

12. (Original) A method for depositing a low dielectric constant film on a substrate, comprising reacting two or more organosilanes selected from the group consisting of methylsilane, dimethylsilane, trimethylsilane, dimethylsilanediol, ethylsilane, phenylsilane, diphenylsilane, diphenylsilanediol, methylphenylsilane, disilanomethane, bis(methylsilano)methane, 1,2-disilanoethane, 1,2-bis(methylsilano)ethane, 2,2-disilanopropane, and 1,3,5-trisilano-2,4,6-trimethylene, while applying RF power, wherein the low dielectric constant film comprises silicon-carbon bonds and a dielectric constant of about 3 or less.

13. (Original) The method of claim 12, wherein one of the organosilanes is 1,3,5-trisilano-2,4,6-trimethylene.

14. (Original) The method of claim 12, wherein the two or more organosilanes are reacted with an oxidizing gas.
15. (Original) The method of claim 14, wherein the oxidizing gas is selected from the group consisting of oxygen, ozone, nitrous oxide, carbon dioxide, and water.
16. (Original) The method of claim 12, wherein the RF power is pulsed to increase the porosity of the film.
17. (Original) A method for depositing a low dielectric constant film on a substrate, comprising reacting two or more organosiloxanes, wherein a first organosiloxane of the two or more organosiloxanes is cyclic and comprises C, H, and O and a ring comprising carbon and oxygen, and a second organosiloxane of the two or more organosiloxanes is selected from the group consisting of 1,3,5,7-tetramethylcyclotetrasiloxane, octamethylcyclotetrasiloxane, and 1,3,5,7,9-pentamethylcyclopentasiloxane, while applying RF power, wherein the low dielectric constant film comprises silicon-carbon bonds and a dielectric constant of about 3 or less.
18. (Original) The method of claim 17, wherein the first organosiloxane is selected from the group consisting of 1,3,5-trisilane-tetrahydropyran, 2,5-disilane-tetrahydrofuran, and 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene.
19. (Original) The method of claim 18, wherein the first organosiloxane is 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene.
20. (Original) The method of claim 17, wherein the two or more organosiloxanes are reacted with an oxidizing gas.

21. (Previously Presented) A method for depositing a low dielectric constant film on a substrate, comprising plasma assisted reaction of a mixture comprising an oxidizing gas and a siloxane comprising



wherein the low dielectric constant film comprises silicon-carbon bonds and a dielectric constant of about 3 or less.

22. (Previously Presented) The method of claim 21, wherein the mixture further comprises a siloxane selected from the group consisting of 1,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane, octamethylcyclotetrasiloxane, 1,3,5,7,9-pentamethylcyclopentasiloxane, bis(1-methyldisiloxanyl)-methane, 2,2-bis(1-methyldisiloxanyl)propane, and 2,5-disilanetetrahydrofuran .

23. (Previously Presented) The method of claim 21, wherein the siloxane is selected from the group consisting of 1,3-bis(silanomethylene)disiloxane, 1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, and 1,3,5-trisilanetetrahydropyran.

24. (Previously Presented) The method of claim 21, wherein the siloxane is 1,3-bis(silanomethylene)disiloxane.

25. (Previously Presented) The method of claim 24, wherein the oxidizing gas is N₂O.

26. (Previously Presented) The method of claim 21, wherein the mixture further comprises an inert gas.

27. (Previously Presented) The method of claim 21, wherein the plasma is formed by RF power comprising high frequency RF power.

28. (Previously Presented) The method of claim 27, wherein the high frequency RF power is pulsed.
29. (New) The method of claim 1, wherein the reacting the two or more organosiloxanes comprises reacting the two or more organosiloxanes with N₂O in the presence of a gas selected from the group consisting of He, Ar, Ne, and nitrogen.
30. (New) The method of claim 12, wherein the reacting the two or more organosilanes comprises reacting the two or more organosilanes with N₂O in the presence of a gas selected from the group consisting of He, Ar, Ne, and nitrogen.
31. (New) The method of claim 17, wherein the reacting the two or more organosiloxanes comprises reacting the two or more organosiloxanes with N₂O in the presence of a gas selected from the group consisting of He, Ar, Ne, and nitrogen.

REMARKS

The Applicant requests that the Examiner enter the amendment prior to examining the application. New claims 29-31 have been added to more clearly claim an aspect of the invention and do not constitute new matter.

Applicants note that new claims 29-31 are within the scope of claim 1 of U.S. patent No. 6,645,883.

Respectfully submitted,



Keith M. Tackett
Registration No. 32,008
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant